



## SEQUENCE LISTING

<110> Ota, Toshio  
Nishikawa, Tetsuo  
Salamov, Asaf  
Isogai, Takao

<120> METHOD FOR SCREENING FULL-LENGTH cDNA  
CLONES

<130> 06501-058001

<140> 09/529,962  
<141> 2000-04-20

<150> JP 9/289982  
<151> 1997-10-22

<150> PCT/JP98/04772  
<151> 1998-10-21

<160> 18

<170> FastSEQ for Windows Version 4.0

<210> 1  
<211> 30  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Oligo-capping linker sequence

<400> 1  
agcaucgagu cgcccuuguu ggccuacugg 30

<210> 2  
<211> 42  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligo(dT) adapter primer sequence

<400> 2  
gcggctgaag acggcctatg tggccttttt tttttttttt tt 42

<210> 3  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Random adapter primer sequence

<221> misc\_feature

<222> (1)...(32)

<223> n = A,T,C or G

<400> 3

gcggctgaag acggcctatg tggccnnnnn nc

32

<210> 4

<211> 880

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)...(880)

<223> n = A,T,C or G

<400> 4

atgcgcccgc	gcggccctat	agggcgctcc	tccgcccgc	gcccgggagc	cgcagccgc	60
gccgccactg	ccactcccgc	tctctcagcg	cgcgcgtcgc	caccgccacc	gccactgcc	120
ctaccaccgt	ctgagctctgc	agtcccgcga	tcccagccat	catgtccata	gagaagatct	180
gggcccggga	gatectggac	tcccgcggga	acccacagct	ggaggtggat	ctctatactg	240
ccaaagggtc	tttcggggt	gcagtgccta	gtggagcctc	tacgggcata	tatgaggccc	300
tggagctgag	ggatggagac	aaacagcggt	acttaggcaa	aggtgtcctg	aaggcagtg	360
accacatcaa	ctccaccatc	gcgccagccc	tcacagctc	aggtctctct	gtggtggagc	420
aagagaaact	ggacaacctg	atgctggagt	tggatgggac	tgagaacaaa	tccaagtttg	480
gggccaatcc	atcctgggtg	tgtctctggc	cgtgtgtgta	gcangggcaa	ctgaacngga	540
actgccccct	tatcgccaca	ttgctcagct	tggncgggaa	ctcanacctc	atcctgcctg	600
ttgccggcct	tcaacgtgat	caatggttgg	cttctcatgc	ctggcaacaa	anctggccat	660
tgcnggaatt	ttcatgatcc	tccccnttgg	gaaactgaaa	aactttccgg	aatgcccntc	720
caactaagtt	gcaaaaggtc	taccnatacc	ccccaaaggg	aattcctcca	aggaacaaaa	780
tnccggggaa	aggaatgccc	cccaattntt	ngggggaata	aaaggtgggc	tttgcccccc	840
cattttcctg	gaaaaaacna	tnaaaaccct	tgggaaactt			880

<210> 5

<211> 645

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)...(645)

<223> n = A,T,C or G

<400> 5

tgtgcgttac	ttacctnac	tcttagcttg	tgcgggacgg	taaccgggac	cgggtgtctg	60
ctcctgtcgc	cttcgcctcc	taatccctag	ccactatgcg	tgagtgcata	tccatccacg	120
ttggccaggc	tgggtgtccan	attggcaatg	cctgctggga	gctctactgc	ctggaacacg	180
gcattccagc	cgatggccag	atgccaaagt	acaagaccat	tgggggagga	gatgactcct	240
tcaacacctt	cttcagttag	acgggcgctg	gcaancacgt	gccccgggct	gtgtttgtag	300
acttggaaac	cacagtcatt	gatgaagttc	gcactggcac	ctaccgccag	ctcttccacc	360
ctgagcagct	catcncaggc	aaggaagatg	ctgccaataa	ctatgcccca	gggcactaca	420
ccattggcaa	ggagatcatt	gaccttgtgt	tggaccgaat	tcgcaagctg	gctgaccant	480
gcaccggtct	tcanggettc	ttggttttcc	acagcttttg	tgggggaact	ggttctgggt	540
tcacctccct	gctcatggaa	cgtctctcag	ttgattatgg	caagaaatcc	aagctggagt	600
tctccattta	cccagcaccc	cnggtttccn	cngctgtant	tnгаа		645

<210> 6

<211> 820  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1) ... (820)  
 <223> n = A,T,C or G

```
<400> 6
cttttttcgc aacggggttg cgcgcagAAC acagggtgtcg tgaaaactac ccctaaaagc      60
caaaatggga aaggaaaaga ctcatatcaa cattgtcgtc attggacacg tagattcggg      120
caagtccacc actactggcc atctgatcta taaatgcggg ggcacgcaca aaagaaccat      180
tgaaaaattt gagaaggagg ctgctgagat gggaaagggc tccttcaagt atgcctgggt      240
cttgataaaa ctgaaagctg agcgtgaacg tggatcacc attgatattc ccttgtggaa      300
atttgagacc agcaagtact atgtgactat cattgatgcc ccaggacaca gagactttat      360
caaaaacatg attacaggga catctcaggc tgactgtgct gtctgattg ttgctgctgg      420
tgttgggtgaa tttgaagctg gtatctccaa gaatgggcag acccgagagc atgcccttct      480
ggcttacaca ctgggtgtga aacaactaat tgcggtgtt aacaaaatgg attcactgan      540
ccaccctaca gccagaagaa atatgangaa attgttaagg aagtcagcac ttacattaag      600
aaaattggct acaaccccga cacagtanca tttgtgccaa tttctgggtg gaatggtgac      660
aacatgctgg aaccaantgc taacatgcct tggttccagg gatggaaaat ccccnttaa      720
ggatggcnat gccattggaa cccctctgct tgaaggctct ggantgcac ctanaccaa      780
ctccttcaaa ttgaaaaacc ccttgcncce gcctcncce      820
```

<210> 7  
 <211> 788  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1) ... (788)  
 <223> n = A,T,C or G

```
<400> 7
gaggctgagg cagtggctcc ttgcacagca gctgcacgcg ccgtggctcc ggatctcttc      60
gtctttgcag cgtagcccga gtcggtcagc gccggaggac ctcagcagcc atgtcgaagc      120
cccatagtga agccgggact gccttcattc agaccagca gctgcacgca gccatggctg      180
acacattcct ggagcacatg tgccgcctgg acattgattc accaccatc acagcccgga      240
acactggcat catctgtacc attggcccag cttcccgatc agtggagacg ttgaaggaga      300
tgattaagtc tggaatgaat gtggctcgtc tgaacttctc tcatggaact catgagtacc      360
atgcggagac catcaagaat gtgcgcacag ccacggaaag ctttgcttct gaccccatcc      420
tctaccggcc cgttgctgtg gctctagaca ctaaaggacc tgagatccga actgggctca      480
tcaagggcag cggcactgca gaggtggagc tgaagaatgg agccactctc aaaatcacgc      540
tggaatatgc ctacatggaa aagtgtgacg agaacatcct gtggctggac tacaagaaca      600
tctgcaagggt ggtggaagtg ggcaacaaga tctacgtgga tgatgggctn atttctctcc      660
aggtgaacac aaaggtgccg acttctctgg tgaacngant ggaaaatggg ggctccttgg      720
gcncaagaaa ggtgtgaact tctgggggct gctgtggant tgctgctgt gtcncaaaaa      780
gacatcca
```

<210> 8  
 <211> 608  
 <212> DNA  
 <213> Homo sapiens

<220>

```
<221> misc_feature
<222> (1)...(608)
<223> n = A,T,C or G
```

```
<400> 8
acagcctggc tcctttgagt atgaatatgc catgcgctgg aaggcactca ttgagatgga      60
gaagcagcag caggaccaag tggaccgcaa catcnaggag gctcgtgaga agctggagat      120
ggagatggaa gctgcacgcc atgagcacca ggtcatgcta atgagacagg atttgatgag      180
gcgccaagaa gaacttcgga ggatggaaga gctgcacaac caagangtgc aaaaacgaaa      240
gcaactggag ctcaggcagg aggaanagcg caggcgccgt gaagaanaga tgcggcggca      300
gcaagaagaa atgatgcggc gacngcagga aggattcaag ggaaccttcc ctgatgcgag      360
agagcaggag attcggatgg gtcngatggc tatgggaggt gctatgggca taaacnacag      420
atgtgccatg cccctgctc ctgtgccagc tggtagccca gctcctccag gacctgccac      480
tattatgccg gatggaactt tgggattgac cccacnaca actgaacgct ttggtcnggc      540
tgctacnatg gaangaattg gggcaattgg tggaaactcc cctgcattcn accgtgcagc      600
tcctggga                                         608
```

```
<210> 9
<211> 608
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(608)
<223> n = A,T,C or G
```

```
<400> 9
atattaaact agtgaagcaa ctaagagaaa atgttaagtc tgctattgat cttgaagaga      60
tggcatctgg tcttaacaaa agaaaaatga ttcagcatgc tgtattttaa gaacttgtga      120
agcttgtaga ccttgaggtt aaggcatgga caccactaa aggaaaacaa aatgtgatta      180
tgtttgttgg attgcaaggg agtggtaaaa caacaacatg ttcaaagcta gcatattatt      240
accagaggaa aggttggaag acctgtttaa tatgtgcaga cacattcaga gcaggggctt      300
ttgaccaact aaaacagaat gctaccaaag caagaattcc attttatgga agctatacag      360
aaatggatcc tgtcatcatt gcttctgaag gtagtagaaa atttaaaaat gaaaattttg      420
aaattattat tgttgataca agtggccgcc acaaacaaga agactctttg tttgaagaaa      480
tgcttcaagt tgctaattgct atacaacctg ataacattgt ttatgtgatg gatgcctcca      540
ttgggcaggg ttgtgaagcc caggctaagg cttttaaaga taaagtagat gtacctcagt      600
aatagtgaca aaacttgatg gccatgcaaa angaagtggg gcactcagtg cagtcgctgc      660
cacaaaaaat ccgattattt tcattgggtac agggggaaca tatanatgac tttgaacctt      720
tcaaaaacac agcctttttat taacaaactt cttggtatng gcgacattga aaggactgat      780
aaataaagtc cacnaattga aatttggatg acnatgnaaa cccttattga aaaaattgaa      840
acatngtcca gttttacttt gcgaaacnt                                         869
```

```
<210> 10
<211> 813
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(813)
<223> n = A,T,C or G
```

```
<400> 10
gttggtggtat ctgtattaag aaatgccctt ttggcgctt atcaattgtc aatctaccaa      60
gcaacttgga aaaagaaacc acacatcgat attgtgccaa tgccttcaaa cttcacaggt      120
```

tgccctatccc	tcgctccaggt	gaagtttttg	gattagttgg	aactaatggt	attggaaagt	180
caactgcttt	aaaaatttta	gcaggaaaac	aaaagccaaa	ccttggaag	tacgatgatc	240
ctcctgactg	gcaggagatt	ttgacttatt	tccgtggatc	tgaattacaa	aattacttta	300
caaagattct	agaagatgac	ctaaaagcca	tcatacaacc	tcaatatgta	gaccagattc	360
ctaaggctgc	aaaggggaca	gtgggatcta	ttttggaccg	aaaagatgaa	acaaagacac	420
aggcaattgt	atgtcagcag	cttgatttaa	cccacctaaa	agaacgaaat	gttgaagatc	480
tttcaggagg	agagttgcag	agatttgctt	gtgctgtcgt	ttgcatacag	aaagctgata	540
ttttcatggt	tgatgagcct	tctagttacc	tagatgtcaa	gcagcgttta	aaggctgcta	600
ttactatacy	atctcttaata	aatccagata	gatatatcat	tgtggtggaa	catgatctaa	660
gtgtattaga	ctatctctcc	gacttcatct	gctgtttata	tgggtgtacca	agcgcctatg	720
gaattgtcac	tatgcctttt	agtgttagaa	aaggcataaa	cnttttttgg	atgggtatgt	780
tccaacagaa	aacttganaa	tcnnaaatgc	ntc			813

<210> 11

<211> 655

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1) ... (655)

<223> n = A,T,C or G

<400> 11

agactctcac	cgcagcggcc	aggaacgcca	gocgttcacg	cgttcgggtcc	tccttggctg	60
actcaccgcc	ctcgccgccg	caccatggac	gccccaggc	aggtgggtcaa	ctttgggcct	120
ggtcccgcga	agctgccgca	ctcagtgttg	ttagagatac	aaaaggaatt	attagactac	180
aaaggagtgt	gcattagtgt	tcttgaaatg	agtcacaggt	catcagattt	tgccaagatt	240
attaacaata	cacagaatct	tgtgcgggaa	ttgctagctg	ttccagacaa	ctataagggtg	300
atTTTTctgc	aaggaggtgg	gtgcggccag	ttcagtgtcg	tccccctaaa	cctcattggc	360
ttgaaagcag	gaagggtgtg	ggactatgtg	gtgacaggag	cttgggtcagc	taaggccgca	420
gaagaagcca	agaagtttgg	gactataaat	atcgttcacc	ctaaacttgg	gagttataca	480
aaaattccag	atccaagcac	ctggaacctc	aaccanattg	cctcctacgt	gttttattgc	540
ncaaatgaaa	cggtgcatgg	tgttganttt	gactttatac	ccnatgtcaa	gggaacanta	600
ctggtttgtg	acattttcct	ccaacttctc	gtccaancca	attgnatggt	tccaa	655

<210> 12

<211> 599

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1) ... (599)

<223> n = A,T,C or G

<400> 12

aaagatgcgc	aggcgccgtg	tggcactcgg	cggtcgaaaag	gggagttcaa	ggagacgggg	60
gcgacgcggc	tgagggcttc	tcgctgggggt	cggggctgca	gccgtcatgc	cggggatagt	120
ggagctgccc	actctagagg	agctgaaagt	agatgaggtg	aaaattagtt	ctgctgtgct	180
taaagctgcg	gcccatcact	atggagctca	atgtgataag	cccaacaagg	aatttatgct	240
ctgccgctgg	gaanagaaag	atccgaggcg	gtgcttagag	gaaggcaaac	tgggtcaacaa	300
gtgtgctttg	gacttcttta	ggcagataaa	acgtcactgt	gcagagcctt	ttacagaata	360
ttggacttgc	attgattata	ctggccagca	gttatttcgt	cactgtcgca	aacagcaggc	420
aaagtttgac	nagtgtgtgc	tggacaaact	gggctgggtg	cggcctgacc	tgggaaaact	480
gtcaaaggtc	accaaagtga	aaacagatcn	acctttaccg	ganaatccct	atcactcaag	540
aacaagaacg	gatcccagcc	ctganatcna	aggaaatctg	cancctgcca	cacatggca	599

<210> 13  
 <211> 597  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1)...(597)  
 <223> n = A,T,C or G

<400> 13  
 atatccggag tagacggagc cgcagtagac ggatccgcgg ctgcaccaaa cactgccctt 60  
 cggagcctgg tagtgggcca caagccccca gtcccagagg cgtgattttc tggcatcctt 120  
 aaatcttgtg tcaaggattg gttataatat aaccagaaac catgacggcg gctgagaacg 180  
 tatgctacac gtttaattaac gtgccaatgg attcagaacc accatctgaa attagcttaa 240  
 aaaatgatct agaaaaagga gatgtaaagt caaagactga agctttgaag aaagtaatca 300  
 ttatgattct gaatggtgaa aaacttcctg gacttctgat gaccatcatt cgttttgtgc 360  
 tacctcttca ggatcacact atcaagaaat tacttctggt attttgggag attgttccta 420  
 aaacaactcc agatgggaga cttttacatg agatgatcct tgtatgtgat gcatacagaa 480  
 aggatcttca acatcctaata gaattttattc naaggatcta ctcttcgttt tctttgcaaa 540  
 ttgaaanaaa canaattgct aaaaccttta atgccaacta tncctgcatt tttggga 597

<210> 14  
 <211> 634  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1)...(634)  
 <223> n = A,T,C or G

<400> 14  
 agactctcac cgcagcggcc aggaacgcca gccgttcacg cgttcgggtcc tccttgggtg 60  
 actcaccgcc ctgcgcccg caccatggac gccccaggc aggtgggtcaa ctttgggcct 120  
 ggtcccgcca agctgccgca ctacagtgtt ttagagatac aaaaggaatt attagactac 180  
 aaagganttgc catttagtgt tcttgaaatg agtcacaggt catcagattt tgccaagatt 240  
 attaacaata cagagaatct tgtgcgggaa ttgctagctg ttccagacaa ctataagggtg 300  
 atttttctgc aaggaggtgg gtgcggccag ttacagtgtg tccccttaa cctcattggc 360  
 ttgaaagcag gaangtgtgc ggactatgtg gtgacaggag cttgggtcagc taaggccgca 420  
 naanaagcca agaantttgg gactataaat atcgttcacc cttaaacttg gagttataca 480  
 aaaattccag atccaagcac ctggaacctc aaccagatg cctcctacgt gtattattgc 540  
 gcnaatgaaa cngtgcattg tgtggantct gactttatac ccgatgtcna ggggaacatac 600  
 tgggttgtga catgtcctca aacttcccg tccna 634

<210> 15  
 <211> 757  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1)...(757)  
 <223> n = A,T,C or G

<400> 15

```

agtctgcggt gggctancgg acgggtccggc ttccggcgggc cgtttctgtc tcttgctggc      60
tgtctcgctg aatcgcgggc gcctttctcat cgctcctgga aggtcccagag cgcgacacca      120
tgtcggaacc cggggggcggc ggcgggcgaag acngctcggc cggattggaa gtgtcggccg      180
tgcanaatgt ggcggacgtg tcgggtgctgc anaagcacct gcgcaagctg gtgccgctgc      240
tgctggagga cggcgggcgaa gcgcccggcg cgctggaggc ggcgctggag gagaagagcg      300
ccctggagca gatgcgcaag ttcttttcgg acccgcacgt ccacacgggtg ctggtggagc      360
gctccacgct caaagtggac gtcggtgatg aaggagaaga agaaaaagaa ttcatttcct      420
ataacatcaa cntagacatt cactatgggg ttaaatecaa tagcttggca ttcattaaac      480
gtactcccggt gattgatgca gataaaccgg tgtcttctca nctccgggtc cttacactca      540
gtgaanactc nccctacnaa aactttgcat tctttcatta acaatgcagt ggctcctttt      600
tttaantcct acattaaaaa atctggcaag gcaaacaggg atggtgataa aatggctcct      660
tcnttgaaa aaaaaattgc cgaactcnaa atnggactcc ttcccttgca ncaaaatttt      720
tgaaattccg gaaaatcanc ctgcccaatt cctcccc      757

```

```

<210> 16
<211> 300
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(300)
<223> n = A,T,C or G

```

```

<400> 16
atcatttcct tatttatatt tcatgttgga atgcttaaatt cgataacctt tgtattttga      60
agtgcgcgac atggaagggtg atctgcaaga gctgcatcag tcaaacaccg ggggataaat      120
ctggatttgg gttccggcgt caagggtgaag ataataccta aagaggaaca ctgtaaaatg      180
ccagaagcag gtgaanagca accacaagtt taaatgaaga caagctgaaa caacgcaagc      240
tggttttata ttagatattt gacttaaact atctcaataa agttttgcag ctttcaccac      300

```

```

<210> 17
<211> 313
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

```

```

<400> 17
aaagatggcg gcgggggagg taggcagagc aggacgccgc tgctgccgcc gccaccgccg      60
cctccgctcc agtcgcctcc ggtccttcaa actcacacct cccgggagga gctgtcctgg      120
cgccgggtcc cgcggggaaa atggtggagc cagggcaaga tttactgctt gctgctttga      180
gtgagagtgg aattagtccg aatgactctt tgatattgat ggtggagatg canggettg      240
aactccaatg cctaccccggt cagttcagca ntcagtgcc a ttantgcat tanaactang      300
tttgagagacc gaa      313

```

```

<210> 18
<211> 667
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(667)

```

<223> n = A,T,C or G.

<400> 18

actgccgggc	tcggcgtgag	tcgctgcggg	gctgacgggg	tggcagtgcg	gcgggttacg	60
gcctggtcag	accataatga	cttcagcaaa	taaagcaatc	gaattacaac	tacaagtga	120
acaaaatgca	gaagaattac	aagactttat	gcgggattta	gaaaactggg	aaaaagacat	180
taaacaaaag	gatatggaac	taagaagaca	gaatggtggt	cctgaagaga	atttacctcc	240
tattcgaaat	gggaatttta	ggaaaaagaa	gaaaggcaaa	gctaaagagt	cttccccaaa	300
accanagagg	aaaacacnaa	aaacaggata	aaatcttatg	attatgangc	atgggcacaaa	360
cttgatgtgg	accgtatcct	tgatgagctt	gacaaagacg	atagtacca	tgagtctctg	420
tctcaagaat	cagagtcgga	agaagatggg	attcatgttg	attcncnaaa	ggctcttggt	480
ttaaaagaaa	agggcnataa	atacttcac	aaggaaaata	tgatgaagca	attgactgct	540
acacnaaagg	cntggatgcc	gatccatn	atcccggtgt	gccaacgaac	anaacntccg	600
catatttttag	actgaaaaaa	tttgctgttg	ctgaatctga	ttgttattta	ncanttgct	660
tgaata						667

Bl  
ma